Notes on some Tortoises collected in Northern Australia

by John Cann *

After two hundred years of colonization, the distribution of Australian Chelids is far from being determined, particularly in the northern regions. Unquestionably, the remoteness of northern Australia, and the lack of interest in this section of our fauna, are responsible for so little being known on distribution limits, especially to interested students.

In September 1971, the author endeavoured to check for tortoises in waterways with visibility reasonably clear enough for skin diving and it was hoped that the fresh water turtle (*Carettochelys insculpta*) would be encountered. This species was first recorded from Australia in 1969.

This work was carried out with permits supplied by: Department of Fisheries and Fauna, West Australia; Northern Territory Administration, Primary Industries Branch: and Department of Interior, Animal Industries Branch, Darwin, N.T.

All tortoises lodged in the Australian Museum, Sydney, are identified by (A.M.) "after mention", followed by the registered museum number. Those still in the "author's collection" are identified by (A.C.) and specimens "released" by (R).

The total collection from this trip, covering some 9,500 miles, will eventually be lodged in the Australian Museum collection. In the event of a new species, the type specimens will be forwarded to the Darwin Museum, Northern Territory.

Our first river camp was at Daly River Mission, on the Daly River, approximately one hundred miles south of Darwin. Unfortunately the river was murky and visibility was restricted to approximately five feet. This made diving dangerous, because of snags, and a stick had to be waved in a circular motion in front and head high, to avoid a sudden encounter with sharp branches and other hazards. Surprisingly enough, tortoises were soon sighted, and in one hour and two hundred yards swimming, the following specimens were collected:

Two yellow-faced *Emydura Sp. 1* plate 1 (A.M. R31723, R31724). Length along carapace 102mm and 110mm.

One *Chelodina rugosa* (A.C.).

One *Emydura australis* (A.C.) No. 1. Head quite large. Carapace length 19.5cm.

Two *Elseya dentata* (A.M. No. R31725).

One specimen (R).

From the Daly River Mission we drove to Clarevale, also on the Daly River, approximately 65 miles from the sea of Anson Bay.

Once again the water was murky, caused by rain up river, and the chance to collect or sight *Carettochelys insculpta* seemed remote. Meeting a full-blooded aboriginal named Narbour raised our hopes, for he had lived by the river for many years, and when shown a photograph of *C. insculpta* he said he had often caught "Pig-nosed Turtle for food". Subsequent checking of his fire place revealed bone remains of this species, plate 2 (A.M. No. R31717).

The following morning Narbour arrived at our camp armed with fishing

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line and wallaby meat for bait. He quickly settled in the branches of an overhanging tree to fish and attempt to collect the $10 reward we had offered for the capture of a live *Carettochelys insculpta*. In half an hour he had caught a fine specimen, plates 3 and 4 (A.C.), and although we remained here for two more days, no further specimens were collected or caught, although every effort was made by Narbour and our party.

Narbour was quite familiar with both long-necked and short-necked tortoises, so when he stated he had seen *C. insculpta* basking on logs at times, is seems reasonable to assume this is a fact: and it is possible this species is nomadic in habit. Narbour knew nothing of the breeding habits of *C. insculpta*, but a police black-tracker of high intelligence gave us directions to a sand bar on the Daly River where the turtles came ashore to nest. The maze of roads along this river, together with our time running out, prevented us from finding this area. Local enquiries made by the author indicate

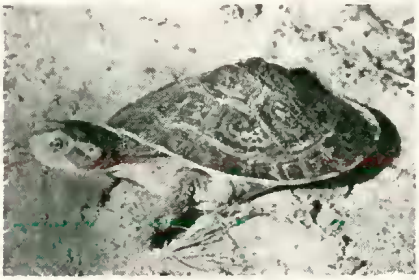

Plate 1

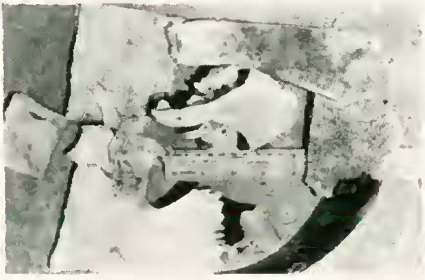

Plate 2

Plate 3

Plate 4

Plate 5

Plate 6

that this species could be found in the following river systems:

Daly, Darwin, Adelaide and McKinlay Rivers.

It therefore would appear *C. insculpta* may inhabit all large waterways in the western side of Northern Australia.

At the next camp, namely Edith Falls on the Edith River Northern Territory, the water was quite clear, and at depths of up to thirty feet *Elseya dentata* could be collected — two to each dive. These were all photographed then released with the exception of one specimen (A.M. RS1728). Only one specimen of *Emydura australis* was encountered at this camp; it was collected (A.C.).

Our next stop was at Katherine, on the Katherine River, Northern Territory, where one *Elseya dentata* was observed; and downstream from the lower river crossing, one specimen of *Emydura australis* was collected (A.M. R31718).

It had been planned to check as many waterways as possible in North West Australia, but time did not permit owing to the great distances between them; thus only a token visit was possible to Ivanhoe Crossing on the Ord River in West Australia. Here one specimen of *Emydura australis* (A.C.) was collected. Although it was 22.2 cm. carapace length, it had a much smaller head than the (A.C.) No. 1 specimen collected at Daly River. One specimen of *Chelodina rugosa* was also sighted at this stop.

From the Ord River, we drove non stop to Borroloola, Northern Territory, a distance of approximately eight hundred and fifty miles. Diving for one hour at Batten Creek four specimens of *Emydura* Sp. 2 were collected, (A.C.) and (A.M. R31726 & R31727). A dried specimen of *Chelodina novaeguineae* was also found on the bank of Batten Creek, (A.C.). *Emydura* Sp. 2 are identical with specimens sent to the author in 1969 from Settlement Creek region North West Queensland. Plate 5 shows the variations in characteristics in this species. Superficially, the facial and carapace colour of this species are almost identical with *Emydura australis*, but a close examination of the roof of the mouth will distinguish between the two. In *Emydura australis* a horny sheath covering the upper jaw extends to the centre line forming a secondary palate. In *Emydura* Sp. 2 the horny sheath is confined to a narrow band along the edge of the upper jaw.

On the return trip, the Bellingen River, central coast of N.S.W., was checked for specimens. Four specimens were collected here and these were lodged at the Australian Museum (A.M. R31719, -20, -21, -22). The author has doubts as to the correct name of these specimens, therefore for the time being will refer to them as *Elseya latisternum*. Dr. J. E. Gray published a paper in 1872 on the genus *Chelymys*, in which he described two tortoises one of which could be this oval-shaped *E. latisternum*. In his descriptions he named one *Euchelymys subclfera*, the other *Elseya spinosa*. Both were collected from Northern Australia and have since been declared synonymous with *Elseya latisternum*, which is why the author has placed them under this name until further work can be carried out on these specimens. If the Bellingen River specimens prove to be *E. latisternum*, there are certainly two distinct forms of this species.

It is the sincere wish of the author that students study these specimens at the Australian Museum, Sydney.

On future field trips they should remember that diving for tortoises is extremely effective, even in the shallows and along river banks. The favourable time is morning or eve-

ning for study or collecting purposes. Possibly there are other rivers, apart from the Daly River, which have at lease five species of Chelids in the same waterhole.

It is also worth noting, that the author found the five species, Plate 6, in the Daly River within a distance of only approximately two hundred yards. A systematic search of a larger stretch of the river could reveal more populations. This could also apply to many more Australian Rivers.

Acknowledgements

I would like to thank Mr. Raymon Mascord for his assistance with this article.

Nature Notes from the Gold Coast

by Alex. N. Burns

Introductory.

The area in which I am living is one that is richly endowed with all kinds of interesting flora and fauna. Situated as it is, one can view the southern extremity of South Stradbroke Island a few miles to the north; Tamborine Mountain embracing Eagle Heights, North Tamborine, and the southern end of the range to the west; Beechmont and Springbrook to the south-west; and fringing the coast itself the portion of the Gold Coast from Main Beach (near Southport) to Palm Beach on the highway to Coolangatta. To the north-east and east, can be seen the ever changing Pacific ocean. Across the road from our garden is the Burleigh Heads National Park; a beautiful still unspoiled area embracing much fine rain forest and some acres of eucalyptus forest. This park is a real sanctuary for many wonderful and interesting animals, birds, reptiles, and insects. As I write, in a small white barked eucalyptus tree some forty feet from the kitchen window, sleeps a half grown koala. At dusk, up to nine small rock wallabies will come down to be fed on bread and fresh fruit and vegetable scraps. These will be accompanied by a similar number of scrub turkeys who also come for their share of the good things. So tame are these lovely creatures that they will take the food from one's hand. Daybreak brings the voices of the currawongs, kookaburras, butcher birds and many other "feathered friends" who frequent this area along with many other fine and interesting species of wild life. Flowers in the garden attract many interesting insects representing many Orders; these are a never ending source of interest and delight. Only a few days ago no less than three females of the Richmond Birdwing butterfly (*Ornithoptera priamus richmondius*) were observed attending flowers of a male Papaya to obtain the nectar so rich in the flowers of these plants. Carpenter and leaf cutting bees are always in evidence on sunny days, as well as many species of Coleoptera and Orthoptera.

This initial note is mainly an introduction to the area from which my nature observations and notes for the future will be made.

Situated 187 feet above sea level with a 180 degree view of the ocean, coastline, and land, it is placed in a wonderful position for natural history observations covering a great variety of terrain.